ABSTRACT OF THE DISCLOSURE

At the time of the speaker adaptation, first feature vector generation sections (7, 8, 9) generate a feature vector series $[c_{i,M}]$ from which the additive noise and multiplicative noise are removed. A second feature vector generation section (12) generates a feature vector series $[s_{i,M}]$ including the features of the additive noise and multiplicative noise. A path search section (10) conducts a path search by comparing the feature vector series $[c_{i,M}]$ to the standard vector $[a_{n,M}]$ of the standard voice HMM (300). When the speaker adaptation section (11) conducts correlation operation on an average feature vector $[\hat{s}_{n,M}]$ of the standard vector $[a_{n,M}]$ corresponding to the path search result Dv and the feature vector series $[s_{i,M}]$, the adaptive vector $[x_{n,M}]$ is generated. The adaptive vector $[x_{n,M}]$ updates the feature vector of the speaker adaptive acoustic model (400) used for the voice recognition.